

NEW THINGS THE SHOWS BRING FOR MOTORISTS

Roomier Bodies, Left Drive and
Cowl Dashes Are Some
of Them.

MORE ELECTRIC EQUIPMENT

Lighting Systems and Self-
Starters, Too, Are Included
by Many Makers.

By H. DENBAR WESTINGHOUSE.

Just because automobiles have reached their present state of perfection does not mean that 1913 models will not show many new features of construction. On the contrary, motor enthusiasts who just at this time are awaiting the opening of the Automobile Show in Grand Central Palace and Madison Square Garden will see many points new and interesting in this season's offerings. Practically without exception every manufacturer has something novel to offer either in the way of added equipment—a feature of the 1913 product—or some important change in construction calculated to render easier and smoother action of his cars.

Bodies, for instance, are larger and roomier this year than ever before. More than ever is the coupe in evidence. Several prominent manufacturers who never before have listed coupe models have added them for the first time this year and the increase in production of these handy little "all weather" vehicles presages their widespread use.

Readers also are in favor and one manufacturer has combined the coupe and the roadster in a manner never before attempted. The body, with the coupe part removed, may be used as an attractive roadster type roadster. With the top in place there is nothing to indicate that it is removable.

The popularity of left drive with centrally located control levers is increasing. Few manufacturers of the newer crop have designed their vehicles to be driven from the right side, and the manufacturers of older and better known cars from the cheapest to the most expensive gradually are adopting left drive. The object of the change from right to left construction is to permit easier entrance and exit to the driver's seat. To make even more prominent this feature several manufacturers have placed their gear shift levers between the two front seats, where they are entirely out of the way.

In appreciation of the fact that not everybody likes the left hand position of the steering wheel several cars are being designed so that the option of either position may be given.

Another feature which is brand new this year and which bears directly on the ease with which a car may be controlled lies in the adoption of deep cowl dashes turned under at the inside and mounted the usual array of ignition switches, carburetor adjustment, engine starter and lighting switches. In this way, the control apparatus is placed nearer to the driver, where it is continually under his eye and it can be reached with the minimum of exertion.

Carrying the idea still further, the manufacturer has located all such apparatus in a small switchboard, which attaches itself to the steering column beneath the steering wheel. On all such switchboards and on the dashes of very nearly all cars, the gasoline tank gauge plays a more important part than ever before, as in itself it serves as a warning against the labor of driving a car and substituting for it the option of either position may be given.

Use of wire wheels, which had its inception abroad, has spread to America. These are offered for their use here where the same that obtains abroad, where suitable wood for wheels is scarce. On several makes of cars, wire wheels are being offered for the first time as standard equipment without extra cost and on several others wire wheels will be optional equipment. They are now being manufactured so as to stand up to the same wear and tear as the solid wheels of European manufacture.

In the realm of other equipment which forms such an important part of this year's cars, it is difficult to mention anything of greater importance and greater value than electric lights and electric engine starters. At last year's show, the makers of cars regularly equipped their cars with electric lights and electric engine starters almost could be counted on the fingers of two hands. Electric lights were standard equipment on almost every car, and electric engine starters were standard on almost every car. The reason for their absence or rather by reason of their very infrequent appearance.

This year, however, all that is changed: there are very few manufacturers who do not equip their cars with complete dynamo electric lighting system and it would take more than ten times two hands in order to get enough fingers to count the number of cars which will be equipped with both electric lighting and electric engine starters. The new type of engine starter has made strides and between the two of them, not overlooking complete electric lighting systems, they have made such progress that the car is now equipped with both electric lights and some sort of engine starters.

Supplementing the regular equipment of steel and lead lamps, several manufacturers have developed a new type of portable "trouble" lamps, which can be "hugged in" at various places around the chassis. In this way a light which is absolutely safe, even right inside the gasoline tank itself, can be used with security wherever it is most needed. Tonnage lights for the inside of coupe tops also are used to a greater extent than ever before. Last year, even some of the means which have been adopted to prevent the lamps from being injured when the top is lowered are as ingenious as they are efficacious.

Another manufacturer has added to his lighting equipment a system which is designed to facilitate the reading of road signs and as a means to reveal the landmarks at the sides usually left in darkness by the head lamps.

Among the mechanical features of the new cars, also, there are many new things. The strife for silence still goes furthest forward and the enclosure of the motor mechanism, which became noticeable last year, is even more apparent this year. Methods of fastening the valve covers are better, however, and in nearly every case they are more easily removable than they have been in the past. The use of spirally cut gears which slide into engagement instead of coming together more abruptly is increasing steadily, and whereas last year their employment in the timing gear train was their principal feature, this year a number of manufacturers employ spirally cut gears between the driven and lay shafts in their transmission mechanisms. Naturally, the gears are made more quiet.

There is a tendency to drive the cam shafts as well as the magneto and water pump shafts by means of silent chains. Greater efficiency and silence of operation are the principal reasons for their use. Needless to say, in all this search for greater efficiency and smoother running the comfort of passengers has not been overlooked. Deep upholstery now is the rule rather than the exception and some manufacturers even have gone to the length of providing cushions fourteen inches thick. One manufacturer regularly equips his cars with cushions no less than eighteen inches in thickness.

Sprung suspension also bears important relation to the comfort of passengers, to say nothing of its effect on the life of the car's mechanism, and a number of manufacturers have very nearly completely redesigned their supports in order to provide greater resiliency and at the same time to reduce the road noise and jolt generally inherent with more than a few flexible springs. Several prominent manufacturers whose vehicles last year were equipped with semi-elliptic rear springs

This is a runabout mounted on the 120 horse-power chassis of the Isotta-Fraschini, an Italian car.

MERCEDES OWNERS ANNOYED.

Claims Made for License Fees Held to Be Unjustified.

American owners of Mercedes cars have recently had their patience sorely tried by the avalanche of letters and circulars that has been pouring in on them from the Daimler Manufacturing Company, who maintain they have the sole American rights on Mercedes cars, and are therefore entitled to a fee from Americans driving Mercedes cars, says the *Club Journal* of the Automobile Club of America.

As a result of this attack the Daimler-Motoren-Gesellschaft, manufacturers of the Mercedes cars, maintain that the Daimler Manufacturing Company have not the right to claim license fees from the American users of the Mercedes cars, and have authorized their attorneys, Oakes & Schurz, to take proceedings against the Daimler Manufacturing Company on behalf of the American users of Mercedes.

An idea of the manner in which the situation has been handled is shown from the following letter circular, sent to all of the American owners of Mercedes cars. The circular is written on Daimler Manufacturing Company stationery, and is signed by H. B. Atkins, president. It is headed "The Use of an Unlicensed Mercedes Car in America" and reads as follows:

"Our attention has been drawn to the fact that in a number of instances the Mercedes cars have been purchased abroad and brought into this country and here used without license from us. We control numerous United States patents, including those referred to in the decision rendered lately which patents cover fully the Mercedes car, and no such car may be used in this country without our license.

If Mercedes cars purchased abroad and which have our license plate thereon may be used freely in this country without license from us, and we have no desire to molest owners of vehicles that have been bona fide sold. The users of cars not provided with such license plates are infringers of our patents, and as such are under duty to pay us a license fee.

Mercedes cars purchased with a license plate, please inform us of the number thereon, and give our representative an opportunity to inspect the car. If there is no such license plate we should be pleased to have you call at this office to pay the license fee. The license fee to be attached to your car.

We shall expect to hear from you regarding this matter no later than within seven days from the date of this letter. Perhaps the least advice to the above is made by the letter of the Daimler-Motoren-Gesellschaft Company of Stuttgart, Germany, to a New York law firm who had a complaint from one of its clients. This letter is quoted in full as follows:

"We beg to advise that the Daimler Manufacturing Company, through attorneys Oakes & Schurz, of New York City, is in the midst of the most unscrupulous manner their contract duties toward us.

"We have authorized our attorneys, Oakes & Schurz, of Wall Street, New York City, to take proceedings against the Daimler Manufacturing Company.

"We regret that your client has been annoyed by the Daimler Manufacturing Company, but hope that this attitude will soon terminate.

"If you wish information we would suggest that you address our New York lawyers.

"We are very sorry that this attitude will build a tire that would meet all these conditions, but considered it utterly folly even to attempt it. The solution of the motor truck tire problem is several types of tires from which the motor truck owner may take his choice. Thus he can get the tire adapted to his car, and to the roads and streets over which it is driven.

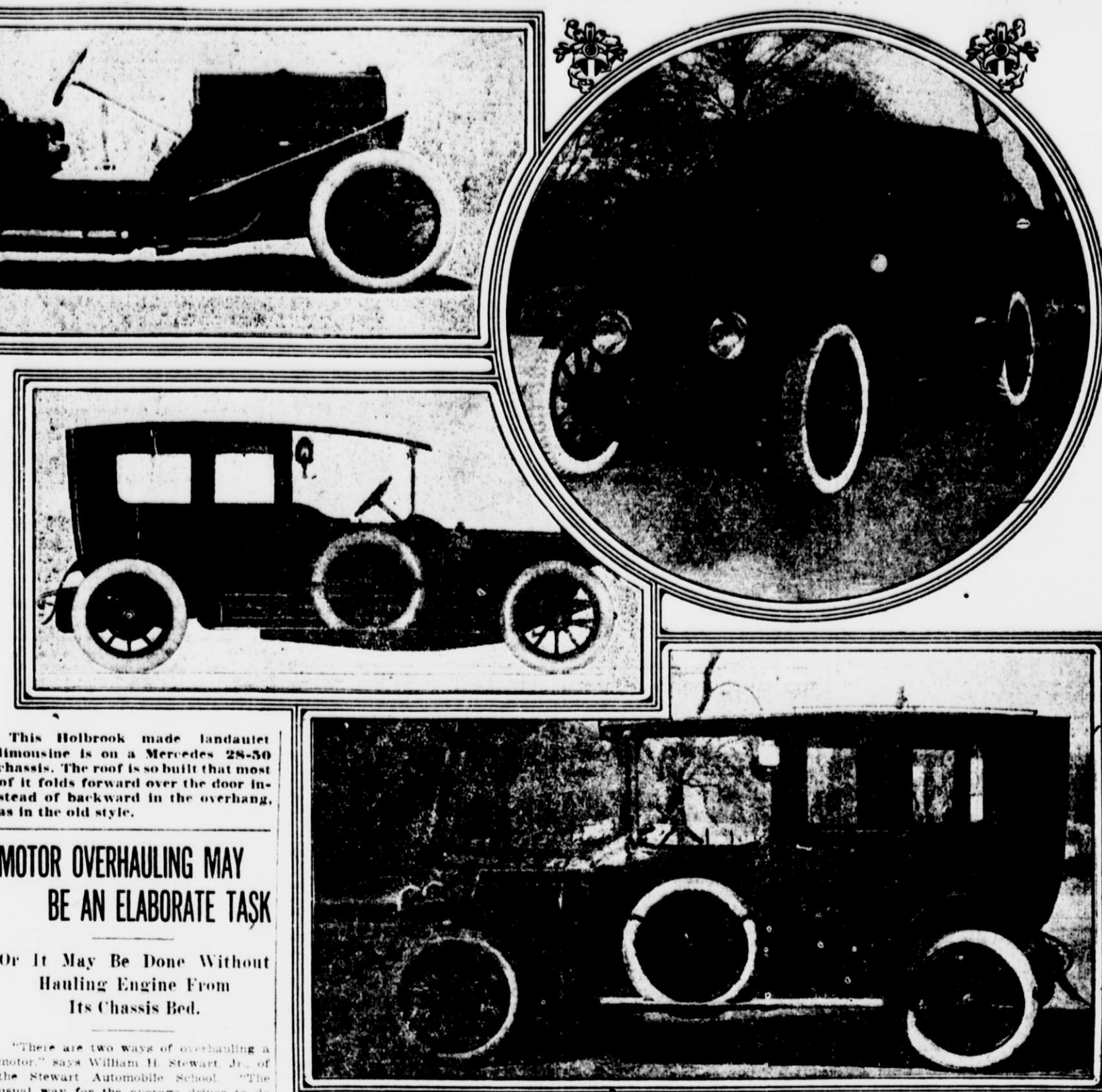
"A motor truck owner in New York operates the same make and model machine as a Michigan friend. He writes telling what a success a certain truck tire is. The Michigan man tries the tire, and is disappointed. The tire was a good tire, but simply wasn't adapted to road conditions in this Michigan town."

Tire Man's Own Casing Run Far. To show that tire makers do not give advice on attention to inflation, because the proper pressure makes the tire give better service and more miles, without real knowledge of the facts, the experience of Horace de Lasser, chairman of the board of directors of the Ajax Tyre & Rubber Company, may be cited. A tire just taken from a rear wheel of his car 8,934 miles before it blew out. It never was off the rim until it blew out. Mr. de Lasser says the fine appearance, due to care in inflation, came in avoiding gases on the roads and careful driving over the worst stretches. The other three tires on the car have done 7,000 miles and are still going.

Edwards-Knight, a Newcomer in Motor Field

An unusual new car is the Edwards-Knight. As the name indicates, it has a Knight motor. Under type worn drive, a sort of cantilever rear spring and wire wheels are some of the features.

SOME FOREIGN CARS AT COMING "SALON"



In the circle above to the right is a De Dion Bouton landaulet, on the 8-cylinder 30 horse-power chassis. Below is an 18 horse-power Minerva, with a De Ruyter limousine body. These cars will be exhibited at the Importers Automobile Salon, beginning January 2, at the Hotel Astor.

MOTOR OVERHAULING MAY BE AN ELABORATE TASK

Or It May Be Done Without
Hauling Engine From
Its Chassis Bed.

"There are two ways of overhauling a motor," says William H. Stewart, Jr., of the Stewart Automobile School. "The usual way for the average driver to do it is to remove the cylinders, clean out the carbon, grind the valves and take up on the wrist pin bearings, connecting rod bearings and main engine bearings. If they need it."

This taking up on the bearings is usually done by taking off the caps and turning the crankshaft. If you have moving one or more of the shafts until the bearing is again snug. If there is a solid shim between the halves of the bearing this must be filed down sufficiently to allow the play to be taken out of the bearing. The other parts of the motor must be carefully looked after and replacements made in a similar manner.

"The other way of overhauling a motor does not come under the duties required of the average driver, but rather of experienced and well trained mechanics. No novice should attempt to scrape in a bearing. To fit a bearing properly in a motor requires experience. It is an art."

In overhauling cases of this kind the whole power plant is removed from the chassis and cranked. The crank, shaft and connecting rods are removed from the crank case. Before the bearings are begun to be fitted the shafts and similar parts are centered and tried up with machinery. After this is done each bearing from the crank shaft up is carefully scraped and fitted. It is not unusual for a first class mechanic to spend a week or more fitting the main engine and connecting rod bearings. There is no rule to advance which will direct an ordinary mechanic properly in this sort of work."

CANADA WILL BUY TRUCKS.

Dominion a Good Field, Says Officer of General Motors Company.

That the big cities of Canada present a good market for American made motor trucks is the idea of E. J. Kilborn, assistant sales manager of General Motors Truck Company, who has been making a trip that included Montreal and other Canadian cities.

"Although Montreal is one of the world's first cities from the standpoint of per capita wealth," says Mr. Kilborn, "it was quite unprepared for its general prosperity and the willingness of its business houses favorably to consider the subject of motor transportation."

"New buildings seem to be springing up on every side, and although by law they are limited to ten stories in height, what they lack in this respect appears to be made up in their rapidly increasing numbers."

"Statistics show that every year there is an influx of settlers into Canada from the United States. The demands of this immense new population for household goods, implements, tools, clothing, drugs and other necessities as well as other articles of commerce make natural the tire increase across the border."

New Oakland Model Is Out.

The first Oakland Model 35 five passenger touring car, the baby of the 1913 line manufactured by the Oakland Motor Car Company of Pontiac, is finished and deliveries will probably be made in January. "The car is the idea of E. J. Kilborn, assistant sales manager of General Motors Truck Company, who has been making a trip that included Montreal and other Canadian cities."

Among other new things at the shows will be the carbody display of the New Miller Manufacturing Company of Indianapolis. In the New Miller carbody, a provision for regulating the needle valve opening from the driving seat, and another for automatic all spring and spring control valves. The needle valve lifter and air valve attachment are connected directly with the throttle.

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SIX PASSENGER BODIES NOW.

Importers' Salon Will Show Some Cars of This Design.

Among the new designs and ideas which the coming Importers Automobile Salon will serve to introduce to American motorists is the six passenger body, both for enclosed and touring cars. This has three rows of seats and makes possible the narrow body necessary to get the straight and slender lines which are now so fashionable.

The plan to build a stone highway from New York to San Francisco to be ready for those intending to tour to the Panama Pacific exposition in 1915 is a project not so much of the visionary as might be thought. The idea, which originated with Carl G. Fisher of Indianapolis, is monumental enough. Mr. Fisher is not in it for any profit to himself, it is understood, and has suggested the idea merely through public spirit. Definite progress has been made toward an accomplishment of the project.

"The plan is to create a fund by subscription from motor car and accessory manufacturers and dealers, each subscription to equal 1 per cent. of one year's gross earnings of the subscriber," says Mr. Fisher. "These subscriptions will be divided into three or five annual payments, as decided by a national committee to be elected later by the subscribers. The fund thus pledged easily should exceed \$10,000,000."

"The assessments in signed agreements are to be made payable to trust companies to be hereafter selected, which shall furnish a bond to the association for all moneys so collected. Not a dollar of this money is to be spent until the entire subscription of at least \$10,000,000 is guaranteed. If for whatever reason the fund should fall of accomplishment the money is to be returned to the donor with 3 per cent. interest added."

"Still further revenue is anticipated from membership issued to individual automobile owners—a \$5 membership, a \$100 membership and a \$1,000 membership, for which an owner can obtain a number of privileges. With the \$1,000 membership plan it is planned to erect mile posts, guide boards, etc. It also is planned to have twelve inch window medals cast, one of which will be given to each dealer who contributes his 1 per cent. to the fund. It is planned to have all the subscriptions signed and closed before January 1, 1914."

"The fund thus subscribed is to be used solely for the purchase of crushed rock and other necessary building material. The Ocean-to-Ocean Highway Association is to do no construction work, but will make contracts with the various States and counties through which the road runs, to put out material on the road as per specifications prepared and given us by the United States Government engineers without charge to us. In a few instances State cooperation in this construction is feasible, but in most instances it is advisable to deal directly with the counties."

"The fund of \$10,000,000 will give us more than 5,000 a mile to spend on the road for this work. Some of the best rock roads in northern Indiana and northern Ohio, nine feet wide and twelve inches thick of rock, with two inches of screening, cost for material alone, \$2,276 a mile. Labor to complete this road—rolling, sprinkling, grading, etc.—brings the total cost up to \$4,100 per mile. The contractor's profit usually is \$500 to \$1,000 a mile. This means that the cost of building material, such as we propose to buy, represents only from 25 to 50 per cent. of the cost of the road, so that for our \$10,000,000 cash we will receive \$25,000,000 road, or, in other words, a road to coast."

"As to the selection of the exact route, this is to be left entirely to the national committee, which is to be selected later. Three good routes have been suggested, any one of which there already are sections of good macadamized road—a total of more than 1,000 miles—which will need but slight improvement, as well as plenty of paved city streets, which will lessen the total mileage of the road to be built."

COAST TO COAST HIGHWAY

PLAN NOW TAKING SHAPE

Carl Fisher's Idea and How It Is Purposed to Carry It to Completion.

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HOOSIER SHOW TRAIN FILLING.

About 112 Places Taken for Trip to New York in January.

Indianapolis, Dec. 21.—Indiana automobile manufacturers are going in a body to the New York show, and have arranged for a special train over the Pennsylvania lines, which will depart for New York at 4:15 P. M. Friday afternoon. This schedule was arranged so that the manufacturers and their guests can make a feature of the dinner on Thursday evening and ride through the mountains and eastern Pennsylvania by daylight.

Soon after the train idea was announced the committee composed of W. D. Edsall and E. E. Wilson of the Indianapolis Motor Car Company, and W. M. White of the Marion Motor Car Company received 112 reservations for space from people all over the Hoosier State. Reservations have been taken by the following:

Press and Advertising Men's Car—Cole Motor Car Company, D. B. Williams, C. E. Anderson, S. C. Hollingsworth, J. L. Ashbaugh, Bruce Daniels, B. F. Lawrence, J. W. Quill, C. H. Henderson, R. W. Macey, W. E. Culp, W. M. K. White and G. A. Weller.

Sales Managers' Car—Cole Motor Company, Indianapolis, Mr. and Mrs. J. M. Switzer, Mr. and Mrs. C. Gibson, Mr. and Mrs. J. H. White, Mr. and Mrs. H. R. Rice, A. C. Dyer.

President's Car—C. C. Henderson, W. D. Edsall, Mr. and Mrs. C. E. Warren, Mr. and Mrs. M. C. McNabb, H. G. Stutz and G. A. Weller.

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As a result of the activities of Robert Lehigh, representative of the Panhard-Levassor factory in Paris, the Panhard-Levassor Silent Knight motor cars will be established not only in Chicago, but in most of the prominent motor car centers of the territory lying between Pittsburg and the Rocky Mountains.

Mr. Lehigh came direct from the famous French plant empowered to inaugurate the agency for each clearing from the Panhard factory branch in New York. He spent much time in Chicago and made advantageous connections for the Panhard company.

Panhard-Levassor purpose turning out 2,500 cars for 1913 and of these 2,500 will be equipped with the Knight engine," says he.

TO SPREAD PANHARD-KNIGHTS.

Agencies Through the Middle West Are to Be Established.

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OIL COMPANIES ABLE TO CUT DOWN GASOLINE

Remedy for Present Situation
Lies in Hands of the
Producers.

MEANS CHANGE IN PROCESS

Production of Lower Grade Fuel
on "Long Cuts"
Would Do It.

A lower price for gasoline whenever the oil companies see fit to reduce it within the grasp of any of them, according to an engineer acquainted with the trade who was interviewed recently. As long as the "other fellows" are able to get the higher prices no one will come down, is his opinion. Furthermore the likelihood is that if one company undercuts the market its rivals may bring down the prices on road oil, bitumen and other such by-products which are the most profitable of the derivatives of petroleum.

He suggests a way that would effect a ready relief in the present market condition, which has come to be a serious matter to owners and makers of automobiles. It is perhaps a trifle technical, but is effectual, he says. "Long cuts," as they are termed in the petroleum industry, afford the solution, which, according to him, is immediately available.

"Gasoline, or naphtha, as is well known, is distilled from crude benzene, which is distilled from crude oil," it is explained in *Motor World*.

The crude benzene is placed in stills which are heated by steam; as the vapors pass over they are condensed. This condensation is divided as it comes from the condenser into fractions or cuts. The first fractions, being very volatile, are called the light end and the later the heavy end."

The engineer quoted maintains that by making a long cut from the light end down to say a Baume gravity of 54 degrees it would serve the purpose. Then the heavy end, which contains all of the fractions of the distillate in their order, the light and volatile parts taking care of the quick ignition of the charge, while the heavy end will take care of the expansion necessary to the operation of automobile engines.

A long cut with none of the intermediate fractions having been drawn off, immediately will no longer increase the production of automobile fuel that it will make possible a price more nearly approximating that which obtained less than a year ago, when nine cents a gallon was the prevailing price. This schedule will not adopt this measure of relief, the engineer states that there is a way of forcing them to do so and a way that would serve many good purposes that it appears worth while.

It was the law which compelled the production of fuel at a certain specified flash test that is directly responsible for the unreason of the gasoline which can be obtained to-day at almost any grocery store in any part of the country," said he in outlining his views in *Motor World*, and whenever a similar law is brought to bear on gasoline, the same result will be obtained. Flash tests will prove abundantly that 64 degrees gasoline is ample for practical purposes, and that the use of gasoline of a lower motor fuel the producers quickly will be brought into line. It means not only a greatly increased supply and a much lower price but it will mean that where the use of gasoline is handled the element of safety will be very measurably increased."

On the subject of kerosene, he said: "From the engineers' standpoint kerosene is the ideal fuel. It is richer in heat units than gasoline, which means that it has higher expansion and more power. Also it has a more uniform range of distillation and uses a larger portion of fuel in carburetors. The gas produced is not contaminated with marsh gas and other gases that break up the cycles of the engine, and kerosene is not so susceptible to atmospheric and relative humidity changes."

"Of course I know that from time out of mind the effort has been in progress to evolve a better engine, and the effort has not ceased. I am firm in the belief that soon rather than later it will be found, but when it is found or before that time engine designers must lend their assistance and make necessary alterations in their motors."